UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _20 August 2003_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-11_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-11_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _8/20/2003 1/9/2007_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

1.   This is a Non-final First Office Action on the Merits on claims 1-11.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Goodman (US Pat. Pub. 2006/059253) in view Parks et al (US Pat. 6,981,000) and

Guheen et al (US Pat. 6,519,571).

        The present invention is an automated method (embodied as instructions on a

computer readable medium) and system for providing a listing of contact information for

technical support persons in response to a request for support of an application

(software product) and displaying the contact information of support persons according

to the time and time zone of the customer service call in relation to one of two support

shifts (i.e. "On Shift" and "Off Shift").   The invention claims utility over the prior art in the

displaying to an operator a list of support persons' contact information such that those assigned to the shift during which the call is initiated are listed first, and those in the other shift are listed second.

Goodman and Guheen disclose automated systems for networked, enterprise-wide software development, operation and support, each providing centralized, developer and end-user Help Desk support. In note of the lengthy disclosures of Goodman and Guheen, Applicant is reminded that citation to passages in the applied art given in the rejections below are for convenience of Applicant, and Applicant is hereby advised to consider the prior art in its entirety in response to any particular teaching or passage relied upon.

Parks discloses automated, technician contact information matching and display for providing customer service and support, including listing available technicians according to the time and in the time zone of the customer service request.

Specifically with respect to the claims as presented:

Claim 1

Goodman teaches receiving requests for help services at the help desk (see ¶ [0198]) and maintaining a contacts database of *main* and *secondary* contacts for software products supported by external vendors, the contact information including address, fax, and telephone information (see ¶ [0201]). In Goodman, *receiving requests to view contact information for support people* for an external vendors product and *displaying the contact information* is inherent to the Help Desk's function of "coordinating the activities of external suppliers to solve problems" (see ¶ [0200]);

otherwise, the Help Desk, being a centralized point of contact for resolving user incidents and problems, would be of no use to users seeking assistance on products supported externally (See column 135, lines 1-9).

However, Goodman does not expressly teach *determining the support people who are On Shift and the support people who are Off Shift for said application, and displaying On Shift support people and Off Shift support people in a list such that the On Shift people are listed before the Off Shift people.*

Parks teaches displaying a list of the available technicians (to the customer for selection) based on the technicians' schedules and availability according to the time service is requested by the customer (see column 12 from line 15), including matching the time zone of the customer (see claim 16) to the technicians' shift schedules (see claim 16). In Parks, if there is no technician who can perform the service at the time requested, the system proposes other technicians who are available in a different time period than requested (see column 13 from line 5).

Guheen teaches that in such a net-centric, application software development environments as Goodman's, developers and users may reside in different time zones (Guheen at column 135, line 47: teaching the use of video conferencing as a means to connect geographically distributed teams and support persons). A centralized Help Desk assisting developers and users who may reside in different time zones must first consider the time zone of the requesting user in relation to the shift schedule of the support persons before providing contact information to the user.

One of ordinary skill in the art would have recognized that applying Parks'

teaching of matching application support availability schedules to the time of the service

request by distributed developers and users residing in different time zones, and

presenting support contact information in a list first showing support persons available

to assist at the time of the support request, would have improved Goodman in a

predictable way, such that the Help Desk operator would first view contact information

on support persons who were readily available at the time users requested help, and

second, view contact information on other support persons available at other times.

Because Goodman and Parks both teach in the art of Help Desk automation using

standard computer database technology and that Goodman expressly teaches *main*

and *secondary* support contacts, it would be well within the capabilities of one of

ordinary skill to add such a contact information listing feature to Goodman.

Thus, it would have been obvious to one of ordinary skill in the art at the time of

the invention to improve Goodman using Parks feature of first displaying contact

information of support people available (i.e. "on shift") according to the time of the help

desk request, and then displaying other technicians available to support the application

in a different time period (i.e. "off shift"), as this would have provided Goodman's Help

Desk the ability to connect distributed developers and users to support persons

according to the time of request and support shift schedules. Listing the contact

information of the "on shift" support persons first, followed by the "off shift" support

persons would have caused the Help Desk person to choose a support contact from

those listed first, thereby ensuring that users are directed to the most readily available external vendor support persons.

That Goodman teaches automated methods by computer systems it is would have been obvious to perform the methods taught as above by recording program instructions on a computer readable medium such that the instructions could be executed by computer.

Claim 2

Goodman teaches a *main* contact and a *secondary contact*, and as the above for claim 1, fairly suggests, in view of Parks and Guheen, the listing of these support persons' contacts in the order recited by the claim.

Claim 3

Goodman does not expressly teach *creating a database specifying said On Shift support hours and said Off Shift support hours for said application, and which of said support people are On Shift and which of said support people are Off Shift*; however, such database is provided by the teachings in Parks (see column 12, line 20: "the database stores information...on serviceable times of the respective technicians..."). For reasons given above in claim 1, the improvement to Goodman using Parks necessarily requires adding the database of Parks to Goodman, the database storing technician availability times (support hours) associated with the support persons' contact database of Goodman.

Claim 4

Goodman teaches or suggests claim 1 as above, including a contacts database

of *main* and *secondary* contacts for software products supported by external vendors,

the contact information including address, fax, and telephone information (see ¶ [0201]);

however, Goodman does not expressly teach which of the methods of contact provided

is the *preferred* contact method.

Guheen teaches that users encountering issues and requesting support will be

provided support according their preferred "defined channel" such as mail, email, fax or

telephone (see Guheen, column 243, line 64); however, Guheen does not expressly

teach that the support person is likewise able to specify a preferred channel. However,

specifying preferred methods of contact for a user applies equally well to a support

person, also a "user". Thus, it would have been obvious to one of ordinary skill at the

time of invention to specify which of the methods of contact provided by the contact

information for the support person is the *preferred* method of contact, as doing so would

have maximized the probability that the support person can be best reached in a timely

manner, thereby improving the response to the user requesting help.

5.   Claims 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Goodman (US Pat. Pub. 2006/059253) in view Parks et al (US Pat. 6,981,000) and

Guheen et al (US Pat. 6,519,571) and further in view of Kaplan et al (US Pat. Pub.

2005/0015501)

Claim 5

Goodman in view of Parks and Guheen, as explained above in the rejection of

claim 1, teaches or suggests *receiving requests to view contact information for support*

people and determining whether said request occurs during On Shift support hours or

Off Shift support hours of said application, and determining the support people who are

On Shift and the support people who are Off Shift for said application.

Further, Goodman suggests, as explained above in claim 4, specifying a

preferred contact method; however, Goodman does not teach or suggest maintaining, in

the Help Desk contact database, *different email addresses for contacting support*

persons, one email address for "on shift" email and one for "off shift" email, and sending

to the support person an email request to the email address corresponding to the time

of the request in relation to the shift schedule of the support contact.

Specifically as recited, Goodman does not expressly teach:

wherein there is a preferred e-mail address for On Shift contact and a

preferred e-mail address for Off Shift contact for each of said support people, and

the preferred e-mail address for On Shift contact is different than the preferred e-

mail address for Off Shift contact for at least one of said support people (see

¶[0000] page column line);

and second program instructions to receive a request to send an e-mail to

one or more of said On Shift and Off Shift support people, and

if said e-mail request occurs On Shift, send the e-mail to the preferred On

Shift e-mail address for each of said one or more On Shift support people and

each of said one or more Off Shift support people (see ¶[0000] page column

line);

and if said e-mail request occurs Off Shift, send the e-mail to the preferred

Off Shift e-mail address for each of said one or more On Shift support people and

each of said one or more Off Shift support people (see ¶[0000] page column

line);

Kaplan teaches automated methods of on-location dispatch of electronics

troubleshooting services, expressly including in the technician contacts database a

primary and a *secondary* telephone number for the technician. Official Notice is taken

as old and well that technicians or persons who provide service and support are either

available while on-shift (i.e. scheduled work time) or on-call (not scheduled but called in

as needed), and that two different contact numbers (e.g. work or home, work or cell,

etc.) are provided to contact the support person depending on their work status. Email

being merely another means of contact by modern electronics, including email readable

by cellular and wireless telephone devices, it would have been obvious to one of

ordinary skill in the art the time of invention to contact the support person at a primary

email address while the technician is on a scheduled work shift (i.e. "on shift"), and to

contact the support person at a secondary email address while the technician is on-call

(i.e. "off-shift"), as this would have provided Goodman's Help Desk more reliable access

to support technicians, thereby providing prompt service to the requesting user.

Claim 6

Goodman does not expressly teach or suggest *displaying On Shift support people and Off Shift support people before said e-mail is sent.* However, in view of Guheen and Parks as above in claim 1, and further in view of Kaplan as in claim 5 above, it would have been obvious to one of ordinary skill in the art at the time of the invention, in displaying the list of available technicians with their contact information, to first display the email address to the Help Desk agent in Goodman, as displaying the list before the email was sent would have allowed the Help Desk agent to first *select* which support person the support request was to be directed, before *contacting* the support person (by email), thereby providing the Help Desk agent the opportunity to first choose among available support persons depending on the nature of the user support request before such request is sent.

Claim 7

Goodman does not expressly teach or suggest *wherein said one or more of said On Shift and Off Shift support people are all of said On Shift and Off Shift support people.* However, in view of Guheen and Parks as above in claim 1, and further in view of Kaplan as in claim 5, it would have been obvious to one of ordinary skill in the art at the time of the invention to display in the list of available support persons *all* of the support persons, as this would have presented to the Help Desk agent the maximum number of support contacts available to provide support, thereby to better choose among all available support persons depending on the nature of the user support request.

Claims 8-10

Goodman does not expressly teach *wherein at least one of said e-mails is sent to a pager; a cell phone, or a computer work station.*

Parks teaches support request messages sent to a technician's terminal, which may be a portable personal digital assistant (PDA), a personal computer, or a wireless phone (Parks, column 7, lines 20-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to send emails to any one of the recited devices, as these were known in the art to be useful for sending support messages to technicians, thereby allowing the support person to receive directly the information needed to satisfy the support request.

Claim 11 recites computer system means for performing method embodied in the computer program product of claim 5 above, and is similarly rejected as above for the respective claim elements, and further for that Goodman teaches or suggests computer system means for performing the equivalent of the functions recited.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Stuart et al. (US Pat. 6639982) teaches methods for automatic call distribution for large call servicing teams, including dividing the service agents into primary and secondary teams where secondary teams are "off-shift" when doing other tasks (such a training).

Sisley et al. (US Pat. 5737728) teaches automated optimization of technician

service call assignments taking into account technician calendars including on and off-

shift schedules, however, assignments are not made to technicians when unavailable.

Kaplan et al. (US Pat. Pub. 2005/0015501) teaches technician dispatch

management for on-location electronics troubleshooting services, including using cell

phone, pager, and email communications to notify technicians of dispatched service

calls, and including tracking on-shift and off-shift availability.

Cherry (US Pat. 6493446) teaches automated methods for call center service call

distribution including distributing calls to on premises agents and to remote agents in

the case of overflow of the local agents.

Delaney (US Pat. 6937715) teaches automated contact center management in

which contact information, availability, and skillsets of distributed service agents are

intelligently merged into a robust distributed call distribution system.

Sanders et al (US Pat. 6574605) teaches automated methods for enterprise-wide

service call workload management for large organizations and high call volumes.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Dave Robertson whose telephone number is (571)272-

8220. The examiner can normally be reached on 9 am to 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Beth Van Doren can be reached on (571) 272-6737. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dave Robertson/
Examiner, Art Unit 3623

/Beth Van Doren/
Supervisory Patent Examiner, Art Unit 3623